

ABSTRACT

SYSTEM, METHOD, AND APPARATUS FOR MULTILEVEL UV MOLDING LITHOGRAPHY FOR AIR BEARING SURFACE PATTERNING

[0058] UV molding from elastomeric masters on thin bendable backplanes that allow replication of UV-cured resist patterns with high accuracy is disclosed. This design accommodates large substrate topographies, has improved de-molding properties, and facilitates two-in-one lithography and assembly of the sliders on topographically structured elastomeric sticky pads. The combination of sticky pad assembly and two-in-one lithography allows an all-in-one harmony process based on UV-molding. These features cure prior art technical problems of the harmony process while significantly reducing cost.